

ABSTRACT OF THE DISCLOSURE

A telecommunications system and method are disclosed for mapping a Transcoder/Rate Adaptor (TRAU) protocol onto a User Datagram Protocol (UDP) for use in an Internet Protocol (IP) based Base Station System (BSS) architecture. All in-band control bits in the TRAU protocol are not relevant when using the UDP protocol. Therefore, when speech information is mapped onto a UDP datagram for transfer to a Channel Codec Unit (CCU) in a Base Transceiver Station (BTS), some of the information normally transferred between a CCU and the TRAU can be removed. For example, a Time Alignment command included in some of frame types is not needed, and should be removed. In addition, bits relating to a frame structure, such as TRAU synchronization bits, tail bits and spare control bits, should be removed from all frame types. Furthermore, a new control bit that contains a sequence number must be added to handle reordering of a packet data stream.